

Name: _____

Date: _____

Radicals Practice: Lessons #1-5**Part One: Multiple Choice:** Write the capital letters of the correct answers in the blanks provided.

1. _____ Simplify $(4 + \sqrt{5})^2$.

E. 21

F. $21 + 8\sqrt{5}$

G. $21 - 4\sqrt{5}$

H. $41 - 8\sqrt{5}$

2. Simplify $(5 - \sqrt{6})(5 + \sqrt{6})$.

A. 19

B. 31

C. $31 - 10\sqrt{6}$

D. $19 - 10\sqrt{6}$

3. Simplify $\sqrt{54} + \sqrt{24}$.

A. 36

B. 10

C. $\sqrt{78}$

D. $5\sqrt{6}$

Part Two: Simplify each expression completely.

4. $\sqrt{2} + \sqrt{8}$	5. $(\sqrt{2} + \sqrt{8})(\sqrt{2} - \sqrt{8})$
6. $\sqrt{2}(\sqrt{8})$	7. $\sqrt{2} - \sqrt{8}$
8. $\frac{\sqrt{2}}{\sqrt{8}}$	9. $\frac{\sqrt{8}}{\sqrt{2}}$

